

WHAT IS CLAIMED IS:

*Sus a2* 1. A display system comprising:  
a host apparatus having an image output interface;  
a display apparatus which is operated by supply of a  
video signal and power from said host apparatus; and  
a communication function for receiving and transmitting  
data between said host apparatus and said display apparatus,  
wherein said host apparatus comprises a storing unit  
for storing power consumption data thereof, and  
said display apparatus transmits said power consumption  
data thereof stored in said storing unit to said host  
apparatus to said host apparatus and said host apparatus  
processes said received power consumption data, thereby  
performing power control of said display system comprising  
said host apparatus and said display apparatus.

*Sus a2* 2. A system according to Claim 1, wherein an interface  
specification for communicating said power consumption data  
conforms with a DDC1/DDC2B/DDC2AB standard prescribed by  
Video Electronics Standards Association or an expansion  
function thereof.

*Sus a2* 3. A system according to Claim 1, wherein said display  
apparatus has a mode for operating only said function for

communication with said host apparatus.

*SUS a 27* 4. A system according to Claim 1, wherein said display apparatus further comprises an alarm indicator lamp for alarm display.

*SUS a 27* 5. A display system comprising:

a host apparatus having an image output interface;  
a display apparatus which is operated by supply of at least one of a video signal and power from said host apparatus; and  
a communication function for receiving and transmitting data between said host apparatus and said display apparatus, wherein said display apparatus comprises a storing unit for storing power consumption data thereof and display-side communication means for transmitting said power consumption data stored in said storing unit, and  
said host apparatus comprises host-side communication means for receiving said power consumption data transmitted from said display apparatus and power control means for entirely performing power control of said display system based on said power consumption data received from said host-side communication means.

*SUS a 27* 6. A system according to Claim 5, wherein said display

apparatus further comprises storing means for storing on-screen display information and said display-side communication means transmits said on-screen display information, and

in said host apparatus, said host-side communication means receives said on-screen display information and further comprises information superimposing means for superimposing said received on-screen display information to the video signal.

*SUSAN* 7. A display system comprising:

a host apparatus having an image output interface;  
a display apparatus which is operated by receiving at least a video signal from said host apparatus; and  
a communication function for receiving and transmitting data between said host apparatus and said display apparatus, and

wherein said display apparatus comprises storing means for storing on-screen display information and display-side communication means for transmitting data which is stored in said storing means,

said host apparatus comprises host-side communication means for receiving the on-screen display information transmitted by said display apparatus and information superimposing means for superimposing the on-screen display

information received from said host-side communication means to the video signal, and

in said display system, said host-side communication means transmits the video signal superimposed to the on-screen display information and said display-side communication means receives the transmitted signal, thus, said display apparatus displays an image of said on-screen display information.

Sub a*ii* 8. A system according to Claim 5, wherein said display apparatus has an interface specification for communication between said host-side communication means and said display-side communication means which conforms with a DDC1/DDC2B/DDC2AB standard prescribed by Video Electronics Standards Association or an expansion function thereof.

Sub a*ii* 9. A system according to Claim 7, wherein said display apparatus has an interface specification for communication between said host-side communication means and said display-side communication means which conforms with a DDC1/DDC2B/DDC2AB standard prescribed by Video Electronics Standards Association or an expansion function thereof.

Sub a*ii* 10. A system according to Claim 5, wherein said display apparatus includes a mode for operating only said

function for communication with said host apparatus.

*Sus 21* 11. A system according to Claim 7, wherein said display apparatus includes a mode for operating only said function for communication with said host apparatus.

12. A system according to Claim 5, wherein said display apparatus further comprises an indicator lamp for alarm display.

13. A system according to Claim 7, wherein said display apparatus further comprises an indicator lamp for alarm display.

*Sus 23* 14. A system according to Claim 6, wherein said host apparatus further comprises first storing means for storing the on-screen display information thereof and second storing means for storing the on-screen display information of said display apparatus which is received via said host-side communication means, and

    said information superimposing means converts the on-screen display information stored in at least one of said first storing means and said second storing means into indicatable bit map information and superimposes it to the video signal.

*Sub a37* 15. A system according to Claim 7, wherein said host apparatus further comprises first storing means for storing the on-screen display information thereof and second storing means for storing the on-screen display information of said display apparatus which is received via said host-side communication means, and

    said information superimposing means converts the on-screen display information stored in at least one of said first storing means and said second storing means into indicatable bit map information and superimposes it to the video signal.

*Sub a37* 16. A system according to Claim 6, wherein said on-screen display information is ASCII text data.

*Sub a37* 17. A system according to Claim 7, wherein said on-screen display information is ASCII text data.

*Sub a37* 18. A system according to Claim 6, wherein said display apparatus can be selectively connected to a plurality of types of host apparatuses.

*Sub a37* 19. A system according to Claim 7, wherein said display apparatus can be selectively connected to a

plurality of types of host apparatuses.

*sub a37* 20. A system according to Claim 6, wherein said host apparatus can be selectively connected to a plurality of types of display apparatuses.

*sub a37* 21. A system according to Claim 7, wherein said host apparatus can be selectively connected to a plurality of types of display apparatuses.

*sub a37* 22. A microdisplay apparatus connected to a host apparatus, comprising:

memory means for storing monitor request voltage information and monitor current consumption information as specific EDID information on said microdisplay apparatus; and

communication interface means for communication with said host apparatus so as to transmit said monitor request voltage information and said monitor current consumption information to said host apparatus.

*sub a37* 23. A display system having a host apparatus and a microdisplay apparatus according to Claim 22, said host apparatus being connected to said microdisplay apparatus via a digital interface, wherein said microdisplay apparatus

further comprises detecting means for detecting a power voltage and a power current consumption, and transmits values of said power voltage and said power current consumption detected by said detecting means to said host apparatus via said communication interface means, and said host apparatus comprises control means for controlling an output voltage of said host apparatus based on said EDID information obtained when being connected to said microdisplay apparatus and said detected values of the power voltage and power current consumption.

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